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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

NGUYEN, THUAN T

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 03/04/2005

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,038

Applicant(s)

MAGGENTI ET AL.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6-12, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Alford et al. (US Patent 5,613,201).

Regarding claim 6, Alford discloses in a controller, a method for reducing latency in a group communication network, the method comprising: receiving an indication from a communication device that a user wishes to initiate a group call; receiving media from the user before processing the request; and buffering the received media for later transmission to another communication device” (Figs. 15-17, the user can activate or initiate a group call by using an actuator 1506 or 1608, and col. 13/line 60 to col. 14/line 56, and data is stored, retrieved and replaced within an EEPROM as a buffer for temporary storing received data, see col. 12/lines 14-61).

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For claim 7, in view of claim 6, Alford discloses “wherein the communication device includes a push-to-talk (PTT) device” (col. 1/lines 25-32 & col. 14/lines 15-26 for mobile push-to-talk device).

For claim 8, in view of claim 6, Alford discloses further “including: transmitting the buffered media to the other communication device if the request is granted” (as shown in prior art Figure 10 that data can be conveyed in ESAS FRAME from mobile users to the others, using EEPROM 1160 as illustrated in Fig. 11 and discussed earlier).

For claim 9, in view of claim 6, Alford suggests further “including: signaling the user to stop sending media if a memory unit used for buffering the received media runs out of space before the request is completely processed and media communication is not established between the other communication device and the controller” (col. 14/lines 27/lines 27-56 as whether the system is accessible or available for communication and memory space or lacking of receiving resource is a part of checking or monitoring the data message, system change or call change etc).

For claim 10, in view of claim 6, Alford discloses further “including: transmitting the buffered media to a target receiver if a memory unit used for buffering the received media runs out of space before the request is processed but media communication is established between the other communication device and the controller”, i.e., a plurality of memories are used for storing media data if one is insufficient or out of space (col. 14/line 57-col. 15/line 29).

For claims 11 and 12, in view of claim 6, Alford shows “wherein a memory unit used for buffering the received media is located in the communication device” and “wherein a memory unit used for buffering the received media is located in the controller” (Fig. 16, and col. 14/line 57-col. 15/line 29).

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Regarding claim 14, Alford teaches “in a controller, a computer-readable medium embodying a method for reducing latency in a group communication network, the method comprising: receiving an indication from a communication device that a user wishes to initiate a group call; receiving media from the user before processing the request; and buffering the received media for later transmission to another communication device” (see claim 6 above).

For claim 16, Alford discloses “a controller for reducing latency in a group communication network, comprising: means for receiving an indication from a communication device that a user wishes to initiate a group call; means for receiving media from the user before processing the request; and means for buffering the received media for later transmission to another communication device” (Fig. 16, controller 1602 and refer again to claim 6 above).

Claim Rejections - 35 USC 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 13, 15, and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alford et al. (U.S. Patent No. 5,613,201) in view of Sigler et al (US Patent 5,717,830).

Regarding claim 1, Alford discloses “in a controller, a method for reducing latency in a group communication network, the method comprising: determining whether any media frame

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belonging to a communication protocol is valid, the media frame being directed to the controller; and modifying the communication protocol if a media frame is valid" (Figs. 8-10 & 17, and col. 11/line 35 to col. 18 for checking status of call, identifiers, call ID and group ID; however, Alford does not mention to check whether a media frame is lost or not; however, in a same environment of providing mobile group communication, Sigler discloses the data frame can be checked whether lost or not using a remote monitoring system (Sigler, col. 15/lines 15-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alford's group communication system with Sigler's known technique in monitoring the loss of frame sync in order to fix or correct the problem during transmission as preferred.

For claims 2-4, Sigler further teaches "wherein the modifying includes sending multiple messages to a sender of the media frame requesting multiple copies of the lost media frame"; "wherein the sending occurs after a predetermined time period" and "wherein the messages include a negative acknowledge (NAK) message", i.e., retransmission is done if the frame is lost and with a negative or failure message (Fig. 28, and col. 21/line 55 to col. 23/line 37 for the entire process).

For claim 5, Alford discloses "wherein the media frame originates from a push-to-talk (PTT) device" (Figs. 8-10 for conventional frames and col. 8/line 40 to col. 9/line 16, Figs. 14-15, and col. 1/lines 25-32 & col. 14/lines 15-26 for mobile push-to-talk device).

Regarding claim 13, the combination of Alford and Signalier teaches "in a controller, a computer-readable medium embodying a method for reducing latency in a group communication network, the method comprising: determining whether any media frame belonging to a

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communication protocol is lost, the media frame being directed to the controller; and modifying the communication protocol if a media frame is lost” (see claim 1 above).

For claim 15, the combination of Alford and Sigler teaches “a controller for reducing latency in a group communication network, comprising: means for determining whether any media frame belonging to a communication protocol is lost, the media frame being directed to the controller; and means for modifying the communication protocol if a media frame is lost” (see claim 1 above).

Regarding claims 17-21, Alford and Sigler discloses these claims for “a controller for reducing latency in a group communication network, the communication device comprising: a receiver to receive information over the network; a transmitter to transmit information over the network; and a processor communicatively coupled with the receiver and the transmitter, the processor being capable of: determining whether any media frame belonging to a communication protocol is lost, media frame being directed to the controller; and modifying the communication protocol if a media frame is lost” (Alford, Fig. 16 for a controller, TX and RX for a transmitter and receiver, and controller 1602 or 1156 of Figure 1 is also a processor, col. 9/line 17 to col. 10/line 30, and refer to claim 1 above).

For claims 22, this claim for “a controller for reducing latency in a group communication network, comprising: a receiver to receive an indication from a communication device that a user wishes to initiate a group call; a memory unit to buffer media that is received from the user before the request is processed; a transmitter for transmitting the buffered data to another communication device after the request is processed; and a processor for processing the received request and the media, the processor being communicatively coupled with the receiver, the

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memory unit, and the transmitter” is a combination of claim 1 and 9 and it is rejected for the reasons given in the scope of claim 1 and 9 as already discussed above.

As for claims 23-26, these claims are rejected for the reasons given in the scope of claims 2-5 as discussed above.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9306, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



**TONY T. NGUYEN
PATENT EXAMINER**

Tony T. Nguyen
Art Unit 2685
February 4, 2005